

RCRA RECORDS CENTER  
FACILITY Patt & Whitney MANST  
I.D. NO. CTD990672081  
FILE LOC. R-1A  
OTHER RDMS # 2478

Patt & Whitney  
E. Hartford  
CTD990672081

RDMS DocID 2478

DECISION GUIDE  
(Facility Description)

SUBJECT REQUIREMENT

CERTIFICATION

A. PART A APPLICATION

B. FACILITY DESCRIPTION

B-1 General Description

A general description of the facility, including the nature of the business. Offsite facilities should identify the types of industry served; onsite facilities should briefly describe the process(es) involved in the generation of hazardous waste.

Key words or phrases:

Nature of business

Standard industrial classification (SIC code)

B-2 Topographic Map

A topographic map showing the facility and a distance of 1000 feet around it, at a scale of 1 inch equal to not more than 200 feet. Map must include: contours sufficient to show surface water flow around facility unit operations, map date, 100-year floodplain area, surface waters, surrounding land uses, a wind rose, map orientation, and legal boundaries of facility site. The map should also indicate location of access control, injection and withdrawal wells, buildings, structures, sewers, loading and unloading areas, fire control facilities, flood control or drainage barriers, runoff control systems, and location of hazardous waste operation units.

Key words or phrases:

100-year floodplain area

Land uses

Wind rose

B-3 Location Information

B-3a Seismic Standard (Reserved)

40 CFR  
SECTION NOS.

122.6(a) and (b)  
122.4(d)  
122.24

122.25(a)(1)

122.25(a)(19)

122.25(a)(11)

122.25(a)(11)(i)  
and (ii)  
264.18(a)

REFERENCES

Appendix I

P. 3-8

Refs. 55, 64  
Ref. 64

P. 75

Ref. 58, Part 1; Ref. 85; Ref. 58, Ch. 1,  
Sec. 5.4, Soil Conservation Service  
State Conservationists, U.S. Geological  
Survey District offices; Ref. 87;  
Ref. 88; Ref. 97  
Ref. 18, Ch. 15.1.10; Ref. 83; Ref. 84;  
Ref. 68; Ref. 86, Ch. 12, Sec. 11.B.2

P. 56

Provided Not provided Not applicable

Comments

Revised downward from earlier Part A

Same

As noted (minor gaps)

DECISION GUIDE (continued)  
(Facility Description)

SUBJECT REQUIREMENT

B-3b Floodplain Standard

Documentation of whether or not the facility is located within a 100-year floodplain, that includes the source of data (Federal Insurance Administration Map or other maps and calculations).

Key words or phrases:

Identifying 100-year flood or floodplain  
Federal Insurance Administration flood map  
Other maps or information

U.S. Army Corp of Engineers  
Soil Conservation Service  
U.S. Geological Survey

C-2 Mapping techniques (independent analysis)

B-3b(1) Demonstration of Compliance

For facilities located within the 100-year floodplain, a description of how the facility is designed, constructed, operated, and maintained to prevent washout of any hazardous waste during a flood. Either of the following may be used:

B-3b(1)(a) Flood Proofing and Flood Protection Measures  
A structural or other engineering study showing how design of the tanks, containers, or waste piles and the flood proofing and protection devices at the facility will prevent washout.

Key words or phrases:

Flooding factors (e.g., wave action)  
Washout  
Washout prevention  
Hydrodynamic and hydrostatic forces  
Flood protection (e.g., floodwalls, dikes, etc.)

Operational units (e.g., tanks, incinerators, etc.)

40 CFR  
SECTION NOS.

122.25(a)(11)(iii)  
264.18(b)

122.25(a)(11)(iv)  
264.18(b)

122.25(a)(11)(iv)  
(A) and (B)

REFERENCES

Ref. 58, Part 1; Ref. 96; Ref. 9  
Ref. 58, Part 1, Sec. 2.1; Ref. 85  
Ref. 58, Part 1, Sec. 2.2; Ref. 87;  
Ref. 85; Ref. 87; Ref. 88; Ref. 98  
Ref. 58, Part 1, Sec. 2.2  
Ref. 58, Part 1, Sec. 2.2  
Ref. 58, Part 1, Sec. 2.2; Ref. 83;  
Ref. 84  
Ref. 58, Part 1, Sec. 2.3

Ref. 99; Ref. 100; Ref. 92; Ref. 93;  
Ref. 94

Ref. 58, Part 1, Sec. 3.3  
Ref. 58, Part 1; Ref. 98  
Ref. 58, Part 1, Sec. 4.0; Ref. 98  
Ref. 58, Part 1, Sec. 4.2; Ref. 69  
Ref. 58, Part 1, Sec. 4.3; Ref. 89;  
Ref. 90; Ref. 91; Ref. 98  
Ref. 58, Part 1, Sec. 3.4; Ref. 29;  
Ref. 30; Ref. 32; Ref. 33; Ref. 34;  
Ref. 35

Provided Not provided Not applicable Comments

✓ map ~~not~~ narrative

✓

✓

DECISION GUIDE (continued)  
(Facility Description; Waste Characteristics)

SUBJECT REQUIREMENT

40 CFR  
SECTION NOS.

REFERENCES

Provided Not provided Not applicable Comments

B-3b(1)(b) Flood Plan  
Description of the procedures to be followed to remove hazardous waste to safety before the facility is flooded, including timing related to flood levels, estimated time to move the waste, the location to which the waste will be moved, demonstration that those facilities will be eligible to receive hazardous waste, the planned procedures, equipment, and personnel to be used, and the potential for accidental discharge of the waste during movement.

122.25(a)(11)(iv)  
(C)

P. 54

Key words or phrases  
Types of floods  
Rates of rise and fall  
Advance warning

Ref. 58, Part 1, Sec. 3.1  
Ref. 58, Part 1, Sec. 3.3.4  
Ref. 58, Part 1, Sec. 3.3.5

B-3b(2) Plan for Future Compliance With Floodplain Standard  
For facilities located within the 100-year floodplain that do not comply with the floodplain standard, a plan showing how and when the facility will be brought into compliance.

122.25(a)(11)(v)

B-4 Traffic Information

122.25(a)(10)

P. 55

A description of the traffic pattern, including estimated volume, traffic control, access road surfacing, load-bearing capacity, and traffic control signals.

Key words or phrases:  
Load-bearing capacity

Ref. 36, ACI 347-78, Ch. 2.2

C. WASTE CHARACTERISTICS

C-1 Chemical and Physical Analyses

122.25(a)(2)  
264.13(a)

For each hazardous waste stored or treated at the facility, a general description of the waste, the hazard characteristics, the basis for hazard designation, and a laboratory report detailing the chemical and physical analyses of representative samples.

Key words or phrases:  
Hazardous properties of waste  
Basis for hazard characterization

Ref. 28; Ref. 65; Ref. 66  
§261, App. VII and Subpart C

C-2 Waste Analysis Plan

122.25(a)(3)  
264.13(b) and (c)

P. 9 & 23

A copy of the Waste Analysis Plan that describes how the analyses required to allow proper treatment, storage, and disposal of hazardous wastes will be carried out.

14,000 #/ft<sup>2</sup>  
last not provided but said available thru inc.  
P. 9-10  
In frequent analysis of waste, rely on knowledge of waste related to raw materials

DECISION GUIDE (continued)  
(Waste Characteristics)

SUBJECT REQUIREMENT

C-2a Parameters and Rationale

A list of parameters chosen for analysis and an explanation of the rationale for their selection.

C-2b Test Methods

A description of the test methods used to test for parameters chosen.

Key words or phrases:

Extraction procedure toxicity  
Ignitability  
Corrosivity  
Reactivity

C-2c Sampling Methods

A list of the sampling methods used to obtain a representative sample of each waste to be analyzed.

Key words or phrases:

Sampling equipment (trier, auger, Coliwasa, weighted bottle, dipper, thief, scoop, and shovel)  
Sampling procedures  
Containers  
Waste piles  
Sampling a drum  
Sampling a barrel, fiber drum, can, bags, or sacs, containing powder or granular waste

C-2d Frequency of Analyses

A description of the frequency at which the analyses will be repeated.

Key words or phrases:

Representative sample

C-2e Additional Requirements for Wastes Generated Offsite

A description of the procedures used to inspect and/or analyze wastes generated offsite that includes procedures to determine their identity and sampling methods used.

Key words and phrases:

Analyses supplied by offsite generators  
Sampling method for wastes generated offsite

40 CFR  
SECTION NOS.

264.13(b)(1)

264.13(b)(2)

264.13(b)(3)  
261, App. I

264.13(b)(4)

264.13(c)

REFERENCES

Ref. 10, Sec. 7.4.2

40 CFR 261, App. II; Ref. 24, Sec. 3.8  
Ref. 6; Ref. 24, Sec. 3.6  
Ref. 6; Ref. 24, Sec. 3.4  
Ref. 6; Ref. 24, Sec. 3.3

Ref. 6, Sec. 3; 40 CFR 261, App. I;  
Ref. 42; Ref. 24, Sec. 4.0; Ref. 18,  
Ch. 9.5; Ref. 21, Ch. V; Ref. 59,  
Part 3; Ref. 60, Part III; Ref. 70;  
Ref. 10, Sec. 7.2.3

Ref. 6, Sec. 3, pp. 3.2.1 to 3.2.19

Ref. 6, p. 3.2.20  
Ref. 42, pp. 19 and 20  
Ref. 42, p. 36  
Ref. 42, p. 37

Ref. 6, Sec. 1, pp. 3 thru 11

40 CFR 261, App. I; Ref. 42; Ref. 24,  
Sec. 4.0; Ref. 18, Ch. 9.5; Ref. 21,  
Ch. V; Ref. 59, Part 3; Ref. 60, Part  
III; Ref. 70; Ref. 52, Sec. 3.3;  
Ref. 10, Sec. 4.2.3

Provided Not provided Not applicable Comments

✓

✓

✓

✓ "as needed"

✓ Similar to other PWA

waste on-site

DECISION GUIDE (continued)  
(Process Information - Containers)

SUBJECT REQUIREMENT

D. PROCESS INFORMATION

D-1 Containers

D-1a Containers With Free Liquids

D-1a(1) Description of Containers

A description of the facility's primary containment devices that includes basic design parameters, dimensions, materials of construction, and compatibility of waste with containers.

122.25(b)(1)(i)(A)  
264.171  
264.172

Key words or phrases:

Types of containers  
Coating and linings  
Container specifications

Advantages and disadvantages of different types of containers

Containers for storing flammable and combustible liquids  
Determining compatibility of wastes

Specific examples of how to determine compatibility

Binary comparison of chemical constituents

Trial mixing of waste

Determining of compatibility of the waste with the containment structure

Corrosion of metals

Protection against corrosion

Properties of materials

Corrosion data survey

Corrosion properties tables

Corrosion inspection (containers)

D-1a(2) Container Management Practices

264.173

A description of container management practices used to ensure that hazardous waste containers are always kept closed during storage, except when adding or removing waste, and that hazardous waste containers are not opened, handled, or stored in a manner that may cause them to rupture or to leak.

Key words or phrases:

Management of containers

Storage practices

Condition of containers

Recovery and reuse of containers

Climatic effects

Container markings

Container dating

40 CFR  
SECTION NOS.

REFERENCES

Provided Not provided Not applicable Comments

p. 99-102

Ref. 2, Ch. 3; Ref. 26, Sec. II

Ref. 2, Ch. 3, Sec. 2

Ref. 2, Ch. 3, Sec. 4; Ref. 26, Sec. III

Ref. 2, Ch. 3, Sec. 5

Ref. 2, Ch. 3, Sec. G

Ref. 1, Ch. 2

Ref. 27, Sec. 4

Ref. 1, Ch. 2, Sec. II

Ref. 1, Ch. 2, Sec. III

Ref. 1, Ch. 3; Ref. 2, Ch. 3, Sec. I

Ref. 1, Ch. 3, Sec. II

Ref. 1, Ch. 3, Sec. III; Ref. 2, Ch. 3, Sec. 2

Ref. 1, Ch. 3, Sec. IV

Ref. 1, App. 1

Ref. 1, App. 2

Ref. 2, Ch. 5-A

p. 99-102

Ref. 2, Ch. 4

Ref. 2, Ch. 4, Sec. B

Ref. 2, Ch. 4, Sec. C-1

Ref. 2, Ch. 4, Sec. C-5; Ref. 40, pp. 9, 15-16; Ref. 41, pp. 1-5

Ref. 2, Ch. 4, Sec. C-1

Ref. 2, Ch. 4, Sec. C-2

Ref. 2, Ch. 4, Sec. C-3

only discuss 2nd containment

no container or transporter information

no discussion on management

DECISION GUIDE (continued)  
(Process Information - Containers)

SUBJECT REQUIREMENT

40 CFR  
SECTION NOS.

REFERENCES

Provided Not provided Not applicable Comments

D-1a(3) Secondary Containment System Design and Operation  
A description of the design and operation of the container storage area containment system showing capability of system to hold spills, leaks, and precipitation. This secondary containment system must have the following documented characteristics:

122.25(b)(1)  
264.175(b)

p. 99-102

D-1a(3)(a) Requirement for the Base to Contain Liquids  
The base under the containers must be free of cracks or gaps and sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed.

264.175(b)(1)

Key words or phrases:  
Adequacy of the containment system  
Construction and characteristics of base materials  
Potential for waste migration through the base

Potential hydraulic impact on the base from loads of waste  
Foundation base and liners

Ref. 2, Ch. 4, Sec. 6  
Ref. 11, App. IX

Ref. 11, Sec. 4.4; Ref. 2, Ch. 4, Sec. 6  
Ref. 11, Sec. 4.4

Ref. 11, Ch. 3-6, 8; Ref. 11, Ch. 1;  
Ref. 15, Ch. 3.2.1

D-1a(3)(b) Containment System Drainage  
The base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids.

122.25(b)(1)(i)(B)  
264.175(b)(2)

11

Key words or phrases:  
Drainage system  
Grading of base  
Container storage practice  
Stacking in pallets  
Stacking on plywood sheets  
Racks

Ref. 13, Sec. 3, Steps 20-22  
Ref. 10, Sec. 8.6  
Ref. 2, Ch. 4, Sec. 8  
Ref. 2, Ch. 4, Sec. B-1  
Ref. 2, Ch. 4, Sec. B-1  
Ref. 2, Ch. 4, Sec. B-2

D-1a(3)(c) Containment System Capacity  
The containment system must have sufficient capacity to contain 10% of the volume of containers or the volume of the largest container, whichever is greater.

122.25(b)(1)(i)(C)  
264.175(b)(3)

11

Key words or phrases:  
Containment structure capacity  
Capacity of accumulated liquid removal system  
Capacity of run-off collection system  
Geographic storm intensity/frequency data

Ref. 2, Ch. 4-G  
Ref. 10, Ch. 4  
Ref. 4, Ch. 3-E; Ref. 10, Ch. 4  
Ref. 13, Sec. 2, Step 7

"solid concrete floor"?

"sloping floor" + plates

~~Show calculations~~

Only give total capacity, not of each compartment, show calculations

DECISION GUIDE (continued)  
(Process Information - Containers)

SUBJECT REQUIREMENT

D-1a(3)(d) Control of Run-on  
Run-on into the containment system must be prevented, unless the collection system has sufficient excess capacity in addition to that required in the above paragraph to contain any run-on that might enter the system.

Key words or phrases:  
Containment system auxiliary structures  
Construction of curbs  
Construction of dikes  
Construction of ditches  
Construction of trenches  
Construction of berms

40 CFR  
SECTION NOS.

122.25(b)(1)(i)(D)  
264.175(b)(4)

REFERENCES

Ref. 2, Ch. 4, Sec. G-5  
Ref. 4, Ch. 3-D  
Ref. 15, Ch. 4.6  
Ref. 4, Ch. 3-D  
Ref. 4, Ch. 3-D  
Ref. 11, Ch. 6.7; Ref. 11,  
Ch. 5.4.2.12

P 99-102

Provided Not provided Not applicable Comments

✓ berms & roofed

D-1a(4) Removal of Liquids from Containment System  
Spilled or leaked waste and accumulated precipitation must be removed from the sump or collection area in a timely manner to prevent overflow of the containment system.

Key words or phrases:  
Removal of accumulated liquids from the containment system  
Physical and chemical characteristics of accumulated liquids  
Sampling methodology  
Analytical methods  
Management of accumulated liquid

122.25(b)(1)(i)(E)  
264.175(b)(5)

Ref. 2, Ch. 4, Sec. G-6; Ref. 10,  
Ch. 4; Ref. 12, Ch. 4  
Ref. 10, Ch. 3  
Ref. 6, Sec. 3  
Ref. 8, Sec. 3  
Ref. 10, Ch. 4

11

✓ In inspection guides,  
inspection frequency,  
time to remove,  
testing?

D-1b Containers Without Free Liquids

D-1b(1) Test for Free Liquids  
For areas that store containers of wastes that do not contain free liquids, the test procedures and results or other documentation or information must show that the wastes do not contain free liquids.

Key words or phrases:  
Test procedures for free liquids

122.25(b)(1)(ii)(A)

Ref. 8, Sec. 3.7

P 101

✓ Test procedures?

DECISION GUIDE (continued)  
(Process Information - Containers)

SUBJECT REQUIREMENT	40 CFR SECTION NOS.	REFERENCES	Provided	Not provided	Not applicable	Comments
<p><b>D-1b(2) Description of Containers</b> A description of the facility primary containment devices that includes basic design parameters, dimensions, materials of construction, and demonstration of compatibility of waste with containers.</p> <p><u>Key words or phrases:</u> Types of containers Coatings and linings Container specifications Advantages and disadvantages of different types of containers Containers for storing flammable and combustible liquids Determining compatibility of wastes Specific examples of how to determine compatibility Binary comparison of chemical constituents Trial mixing of waste Determining the compatibility of the waste with the containment structure Corrosion of metals Protection against corrosion</p> <p>Properties of materials Corrosion data survey Corrosion properties tables Corrosion inspection (containers)</p>	264.171 264.172	<p>Ref. 2, Ch. 3; Ref. 26, Sec. II Ref. 2, Ch. 3, Sec. 2 Ref. 2, Ch. 3, Sec. 4; Ref. 26, Sec. III Ref. 2, Ch. 3, Sec. 5 Ref. 2, Ch. 3, Sec. 5 Ref. 1, Ch. 2 Ref. 27, Sec. 4 Ref. 1, Ch. 2, Sec. II Ref. 1, Ch. 2, Sec. III Ref. 1, Ch. 3; Ref. 2, Ch. 3, Sec. 1  Ref. 1, Ch. 3, Sec. II Ref. 1, Ch. 3, Sec. III; Ref. 2, Ch. 3, Sec. 2 Ref. 1, Ch. 3, Sec. IV Ref. 1, App. 1 Ref. 1, App. 2 Ref. 2, Ch. 5-A</p>				<i>cliff</i>
<p><b>D-1b(3) Container Management Practices</b> A description of container management practices used to ensure that hazardous waste containers are always kept closed during storage except when adding or removing waste, and that hazardous waste containers are not opened, handled, or stored in a manner that may cause the container to rupture or to leak.</p> <p><u>Key words or phrases:</u> Management of containers Storage practices Condition of containers Recovery and reuse of containers Climatic effects Container markings Container dating</p>	264.173	<p>Ref. 2, Ch. 4 Ref. 2, Ch. 4, Sec. B Ref. 2, Ch. 4, Sec. C-1 Ref. 2, Ch. 4, Sec. C-5 Ref. 2, Ch. 4, Sec. C-1 Ref. 2, Ch. 4, Sec. C-2 Ref. 2, Ch. 4, Sec. C-3</p>				
<p><b>D-1b(4) Container Storage Area Drainage</b> A description of how the storage area is designed or operated to drain and remove liquids unless containers are otherwise kept from contact with standing liquids.</p> <p><u>Key words or phrases:</u> Drainage system Grading of base Container storage practice Stacking in pallets Stacking on plywood sheets Racks</p>	122.25(b)(1)(ii)(B) 264.175(c)	<p>Ref. 13, Sec. 3, Steps 20-22 Ref. 10, Sec. 8.6 Ref. 2, Ch. 4, Sec. B Ref. 2, Ch. 4, Sec. B-1 Ref. 2, Ch. 4, Sec. B-1 Ref. 2, Ch. 4, Sec. B-2</p>				



DECISION GUIDE (continued)  
(Process Information - Tanks)

SUBJECT REQUIREMENT

D-2 Tanks

D-2a Description of Tanks

A review of tank design specifications to assure that the tanks will not collapse or rupture. The specifications to be reviewed include shell strength, capacity, pressure controls, foundation, structural support, and seams.

Key words or phrases:

Tank design considerations  
Types of tanks  
Tank construction material  
Tank wall thickness, lining material  
Tank internal pressure and pressure controls  
Subsurface and foundation construction  
Tank design specifications for steel tanks  
Tank design specifications for concrete tanks

D-2b Tank Corrosion and Erosion

A review of the pertinent characteristics of the tank construction material and lining materials to determine corrosion or erosion effects with wastes and other materials (i.e., treatment reagents).

Key words or phrases:

Tank lining and coating material or other means of protection  
Corrosion allowances and corrosion and erosion rates  
Tank construction compatibility with waste

D-2c Tank Management Practices

A description of the tank owner's or operator's operating practices and controls to prevent overfilling (such as a waste feed cut-off system or by-pass system to a standby tank), and maintenance of sufficient freeboard to prevent over-topping by wave or wind action or precipitation for uncovered tanks.

Key words or phrases:

Tank ancillary design features  
Tank vapor recovery system  
Tank process flow, instrumentation, and piping  
Tank operating problems associated with in-tank process  
Sufficient freeboard

40 CFR  
SECTION NOS.

122.25(b)(2)  
264.191

122.25(b)(2)(ii)  
264.192(a)

122.25(b)(2)(iv)  
and (v)  
264.192(b)

REFERENCES

Ref. 3, Ch. 3  
Ref. 3, App. A  
Ref. 3, Ch. 3-2a through 3-2c  
Ref. 3, Ch. 3-2b  
Ref. 3, Ch. 3-1, Ref. 31  
Ref. 3, App. C; Ref. 3, Ch. 4, Sec. 8  
Ref. 29, 30, 32, 33, 34, 35, 36

Ref. 3, Ch. 3-3; Ref. 3, Ch. 3-e  
Ref. 3, pp. 3-20 to 3-28  
Ref. 1; Ref. 3, Ch. 3-2

Ref. 3, Ch. 3-C; App. D; App. E  
Ref. 3, App. 8  
Ref. 3, Ch. 3-D  
Ref. 3, Ch. 5  
Ref. 3, Ch. 3, Sec. C-c

Provided Not provided Not applicable Comments

DECISION GUIDE (continued)  
(Process Information - Waste Piles)

SUBJECT REQUIREMENT

D-3 Waste Piles

D-3a Waste Piles With Free Liquid

A detailed engineering description of the facility design and/or a detailed description of the facility operating procedure that applies to the following:

- D-3a(1) Control of Wind Dispersal  
A description of practices to control wind disposal (e.g., cover or frequent wetting) of hazardous waste in piles.

Key words or phrases:

Control of wind dispersal  
Water sprays  
Compaction of pile  
Siting of pile  
Dust suppressants (other than water)  
Stabilizers  
Wind breaks  
Enclosures

122.25(b)(4)(i)(A)  
264.251(a) (1) (1)  
264.252(a)

- D-3a(2) Control of Run-on  
Describe the measures to divert run-on away from the pile.

Key words or phrases:

Diversion of run-on  
Curbs  
Walls  
Berms  
Dikes  
Trenches  
Other barriers

122.25(b)(4)(i)  
(B)(1)  
264.252(b)

- D-3a(3) Collection of Leachate and Runoff  
Describe leachate and runoff collection and control system.

Key words or phrases:

Leachate and runoff control systems  
System components for detection of leachate  
System components for collection of leachate  
System components for control of leachate and runoff  
Pile base and liner(s) type  
Leachate management  
Leachate disposal options  
Leachate treatment technologies

122.25(b)(4)(i)  
(B)(2)  
122.25(b)(4)(i)  
(c)(2)  
264.251(b)  
264.252(c)  
264.253(a)(1)(2)

40 CFR  
SECTION NOS.

REFERENCES

Provided Not provided Not applicable Comments

Ref. 4, Ch. 3-A  
Ref. 4, Ch. 3-A.3  
Ref. 4, Ch. 3-A.2  
Ref. 4, Ch. 3-A.1  
Ref. 4, Ch. 3-A.4  
Ref. 4, Ch. 3-A.5  
Ref. 4, Ch. 3-A.6  
Ref. 4, Ch. 3-A.7

Ref. 4, Ch. 3-D  
Ref. 4, Ch. 3-D  
Ref. 4, Ch. 3-D  
Ref. 11, Ch. 5.4.2.12 and Ch. 6.7  
Ref. 15, Ch. 4.6  
Ref. 4, Ch. 3-D  
Ref. 4, Ch. 3-D

Ref. 4, Ch. 3-E; Ref. 10, Ch. 4  
Ref. 4, Ch. 3-E; Ref. 10, Ch. 4  
Ref. 11, App. V  
Ref. 4, Ch. 3-E; Ref. 10, Ch. 4  
Ref. 11, Ch. 1; Ref. 11, Ch. 3.1  
Ref. 10, Sec. 4

Ref. 10, Sec. 5

DECISION GUIDE (continued)  
(Process Information - Waste Piles)

SUBJECT REQUIREMENT	40 CFR SECTION NOS.	REFERENCES	Provided	Not provided	Not applicable	Comments
<p><b>D-3a(4) Foundation</b> Description of the foundation supporting the base that demonstrates the foundation is capable of supporting the base or liner and the waste pile.</p> <p><u>Key words or phrases:</u> Foundation construction information Foundation material Foundation weight-loading and stress limitations</p>	<p>122.25(b)(4)(1) (8)(3) 264.253(b)(2)</p>	<p>Ref. 4, Ch. 3-F-2 Ref. 11, Ch. 5.2.4.4</p>				
<p><b>D-3a(5) Waste Pile Base</b> <b>D-3a(5)(a) Containment System Design</b> Description of the design specifications of the pile base or liner(s), that includes the estimated containment life of the base; permeability and thickness of the liner(s); characteristics of the waste or leachate to which the liners are exposed; demonstration that liners are of sufficient strength and thickness to prevent failure; and estimated life of the hazardous waste pile (containment system must have a containment life equal to or greater than the life of the pile).</p> <p><u>Key words or phrases:</u> Pile base and liner(s) type Permeability of the liner Thickness of the liner Breaking strength of liner (minimum lbs.) Tear strength of liner(s) Weathering information (i.e., high/low temperature impacts and exposure to ultraviolet rays) Compatibility with waste pile and waste pile leachate Liner performance/life factors Estimated life of the hazardous waste pile</p>	<p>122.25(b)(4)(1) (8)(4) and 122.25 (b)(4)(1)(B)(5) 264.253(a) 264.253(b) 264.253(d)</p>	<p>Ref. 11, Ch. 1, Ch. 3.1 Ref. 11, App. IX Ref. 11, Ch. 3-6, 8 Ref. 4, Ch. 3-F-1</p>				
<p><b>D-3a(5)(b) Leachate Detection Collection and Removal System</b> If the base liner(s) are not of sufficient strength and thickness to prevent failure because of physical damage from equipment used to clean and expose the liner surface for inspection, then a description of the leachate detection, collection, and removal system beneath the base to detect, contain, collect, and remove any discharge is required. The system placement above the water table must be demonstrated, or a description of any necessary efforts to control the water table to comply with requirement.</p> <p><u>Key words or phrases:</u> Relationship of leachate systems to ground water table Ground water controls</p>	<p>122.25(b)(4)(1) (8)(6) 264.253(a)</p>	<p>Ref. 11, Ch. 4.6.2.3  Ref. 15, Ch. 3.2.1 Ref. 3, Sec. C</p>				
		<p>Ref. 4, Ch. 3-F-3 Ref. 15, Ch. 4.8.3</p>				

DECISION GUIDE (continued)  
(Process Information - Waste Piles)

SUBJECT REQUIREMENT	40 CFR SECTION NOS.	REFERENCES	Provided	Not provided	Not applicable	Comments
<p>D-3a(6) <b>Vegetation and Rodent Control</b> A description of efforts to protect the containment system from vegetation growth or other possible problems that could damage any component of the system.</p> <p><u>Key words or phrases:</u> Vegetation control Rodent/pest management</p>	<p>122.25(b)(4)(1) (C)(1) 264.253(c)</p>	<p>Ref. 11, Ch. 6.7.1 Ref. 11, Ch. 6.7.2</p>				
<p>D-3a(7) <b>Equipment and Procedures for Waste Pile Movement</b> A description of the facility equipment and operation procedures used when adding waste to the pile or removing waste from the pile to clean and expose the liner surface.</p> <p><u>Key words or phrases:</u> Equipment Procedures</p>	<p>122.25(4)(1)(C)(3)</p>	<p>Ref. 11, App. 4 Ref. 11, App. 4</p>				
<p>D-3b <b>Waste Piles Without Free Liquids</b></p> <p>A detailed engineering description of the facility design and/or a detailed description of the facility operating procedures that applies to the following:</p>						
<p>D-3b(1) <b>Test for Free Liquids</b> For waste piles used to store or treat only hazardous wastes that do not contain free liquids under the special requirements of §264-250(b), a demonstration of compliance with those requirements including:</p> <p>Test procedures and results or other documentation or information to show that wastes do not contain free liquids and the wastes will not generate leachate by decomposition or other reactions while the waste is in the pile.</p> <p><u>Key words or phrases:</u> Analytical methods for waste analysis of free liquids Leachate generation Waste pile sampler Sampling waste piles</p>	<p>122.25(b)(4)(1)(A)</p>	<p>Ref. 7, Sec. 3.7 Ref. 10, Sec. 1; Ref. 10, Sec. 2 Ref. 42, pp. 19-20 Ref. 42, pp. 38</p>				
<p>D-3b(2) <b>Control of Wind Dispersal</b> A description of how the pile is protected from dispersal of the waste by wind (by means other than wetting), where necessary.</p> <p><u>Key words or phrases:</u> Control of wind dispersal Compaction of pile Siting of pile Dust suppressants (other than water) Stabilizers Wind breaks Enclosures</p>	<p>122.25(b)(4)(1)(C) 264.250(b)(4)</p>	<p>Ref. 4, Ch. 3-A Ref. 4, Ch. 3-A.2 Ref. 4, Ch. 3-A.1 Ref. 4, Ch. 3-A.4 Ref. 4, Ch. 3-A.6 Ref. 4, Ch. 3-A.6 Ref. 4, Ch. 3-A.7</p>				

DECISION GUIDE (continued)  
(Process Information - Waste Piles; Procedures to Prevent Hazards)

SUBJECT REQUIREMENT	40 CFR SECTION NOS.	REFERENCES	Provided	Not provided	Not applicable	Comments
D-3b(3) <u>Protection From Precipitation and Run-on</u> A description of how the pile is protected from precipitation by a structure so that neither runoff nor leachate is generated that includes a detailed description of the structure. A description of how the pile is protected from surface water run-on.  <u>Key words or phrases:</u> Siting of pile Enclosure structures	122.25(b)(4)(ii)(B) 264.250(b)(2) 264.250(b)(3)	Ref. 4, Ch. 3-A.1 Ref. 4, Ch. 3, Sec. A-7				
D-3b(4) <u>Demonstration of No Free Liquids Placed on Pile</u> Demonstration that liquids or materials containing free liquids are not placed in the pile.  <u>Key words or phrases:</u> Waste analysis for free liquids Waste received at facility	122.25(b)(4)(ii) (0)(2) 264.250(b)(1)	Ref. 7, Sec. 3.7 Ref. 10, Sec. 7.3.1				
D-4 <u>Surface Impoundments (Reserved)</u>						
D-5 <u>Incinerators (Reserved)</u>						
E. GROUND WATER MONITORING (RESERVED)						
F. PROCEDURES TO PREVENT HAZARDS						
F-1 <u>Security</u>						
F-1a <u>Security Procedures and Equipment</u>  Unless a waiver is granted, the facility must demonstrate the following:	264.14 122.25(a)(4)					
F-1a(1) <u>24-hour Surveillance System</u> A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel) that continuously monitors and controls entry onto the active portion of the facility; or  <u>Key words or phrases:</u> Security systems and procedures	264.14(b)(1)	Ref. 49				
F-1a(2) <u>Barrier and Means to Control Entry</u> F-1a(2)(a) <u>Barrier</u> An artificial or natural barrier (e.g., a fence in good repair or a fence combined with a cliff), that completely surrounds the active portion of the facility; and  <u>Key words or phrases:</u> Security systems and procedures	264.14(b)(2)(1)	Ref. 49				

f 25

✓ Very Secure

DECISION GUIDE (continued)  
(Procedures to Prevent Hazards).

SUBJECT REQUIREMENT

- F-1a(2)(b) Means to Control Entry  
A means to control entry, at all times, through the gates or other entrances to the active portion of the facility (e.g., an attendant, television monitors, locked entrance, or controlled roadway access to the facility).
- F-1a(3) Warning Signs  
The facility must have a sign with the legend, "Danger - Unauthorized Personnel Keep Out," which must be posted at each entrance to the active portion of the facility and at other locations, in sufficient numbers to be seen from any approach to this active portion. The legend must be written in English and in any other language predominant in the area surrounding the facility and must be legible from a distance of at least 25 feet. Existing signs with a legend other than "Danger - Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous.
- F-1b Waiver  
If a waiver of these requirements is requested, the owner or operator must demonstrate the following:
- F-1b(1) Injury to Intruder  
Physical contact with the waste, structure, or equipment within the active portion of the facility will not injure unknowing or unauthorized persons or livestock that may enter the active portion of a facility; and
- F-1b(2) Violation Caused By Intruder  
Disturbance of the waste or equipment by the unknowing or unauthorized entry of persons or livestock onto the active portion of a facility will not cause a violation of the requirements of this part.
- Key words or phrases for both F-1b(1) and (2):  
Nature and extent of hazard potential from wastes  
Duration of hazard potential  
Equipment and structures to minimize the potential for an intruder to cause a spill; mix incompatible wastes, ignitable or reactive wastes; damage containment systems; damage monitoring systems  
Features that prevent contact with waste

40 CFR  
SECTION NOS.

264.14(b)(2)(ii)

264.14(c)

264.14(a)

264.14(a)(1)

264.14(a)(2)

REFERENCES

Ref. 24, Ch. 5, Secs. 2 and 4

Ref. 24, Ch. 5, Secs. 3 and 4

Ref. 28, pp. 331-1106; Ref. 44; Ref. 46

Provided Not provided Not applicable Comments

DECISION GUIDE (continued)  
(Procedures to Prevent Hazards)

SUBJECT REQUIREMENT

F-2 Inspection Schedule

F-2a General Inspection Requirements

A description of the facility schedule for inspection of monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment that are vital to prevent, detect, or respond to environmental or human health hazards. (Schedule must be kept at the facility.)

Key words or phrases:

Monitoring Equipment Examples:

Flow and liquid level monitors  
Leachate monitors  
Hazardous gas detectors

Safety and Emergency Equipment Examples:

Respirators  
Communication systems  
Alarm systems  
Emergency lighting  
Smoke detectors  
Fire protection equipment  
First aid equipment  
Decontamination equipment

Security Devices Examples:

Surveillance systems  
Barriers surrounding facility  
Locking devices

Operating and Structural Equipment Examples:

Spill detection devices  
Spill control and collection equipment  
Fire and explosion barriers  
Ventilation equipment

F-2a(1) Types of Problems

The schedule must identify the types of problems to look for during the inspection.

F-2a(2) Frequency of Inspection

A description of the frequency of inspection for items on the schedule. The frequency of inspection should be based on the rate of possible deterioration of equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or operator error goes undetected between inspections. (Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use.)

40 CFR  
SECTION NOS.

122.25(a)(5)  
264.15

264.15(a) and (b)  
264.33

264.15(b)(3)

264.15(b)(4)

REFERENCES

Ref. 45, Ch. 9  
Ref. 25, Vol. 12  
Ref. 25  
Ref. 25  
Ref. 25, Vol. 1

Provided Not provided Not applicable Comments

P. 28-29

✓

P. 28-32

✓

Inspection guides

P. 26-33

✗

P. 33 daily storage

tank inspection for  
freeboard not referenced  
in text P. 26-27

DECISION GUIDE (continued)  
(Procedures to Prevent Hazards)

SUBJECT REQUIREMENT	40 CFR SECTION NOS.	REFERENCES	Provided	Not provided	Not applicable	Comments
<b>F-2b Specific Process Inspection Requirements</b>						
<b>F-2b(1) Container Inspection</b> Documentation of weekly inspections of containers and container storage area for deterioration caused by corrosion or other factors.  <u>Key words or phrases:</u> Evaluation of an inspection plan including remedial procedures External inspection-visual maintenance check for corrosion of containers Visual inspection check of the storage area and containment system Testing of auxiliary features Inspection procedures	264.174	Ref. 2, Ch. 5	✓			<i>Parcel Storage Area</i> <del>not for</del> <i>transportation</i> <i>back</i>
<b>F-2b(2) Tank Inspection</b> Documentation of daily or weekly inspection procedures by the facility owner or operator of the following:	264.194(a) and (b)	Ref. 2, Ch. 5-C Ref. 2, Ch. 5-A Ref. 2, Ch. 5-B.1 Ref. 2, Ch. 5-B.2 Ref. 21, App. G				
<b>F-2b(2)(a) Tank Construction Materials</b> The construction materials of the above-ground portions of the tank to detect corrosion or erosion and leaking of fixtures and seams (weekly).  <u>Key words or phrases:</u> Tank exterior inspection General inspection procedures Inspection of prestressed concrete tanks	264.194(a)(4)	Ref. 82	✓			
<b>F-2b(2)(b) Tank Surrounding Area</b> The area immediately surrounding the tank to detect obvious signs of leakage (weekly).	264.194(a)(5)	Ref. 82	✓			<i>in Inspect</i> <del>not dismissed</del>
<b>F-2b(2)(c) Tank Overfilling Control Equipment</b> Overfilling control equipment (e.g., waste-feed cutoff systems and bypass systems) to ensure good working order (daily).	264.194(a)(1)	Ref. 82	✓			
<b>F-2b(2)(d) Tank Monitoring Data</b> Data gathered from monitoring equipment (e.g., pressure and temperature gauges) where present to ensure that the tank is operated according to design specifications (daily).  <u>Key words or phrases:</u> Example of corrosion monitoring system	264.194(a)(2)		✓			<i>no monitoring of</i> <i>Tor P, not</i> <i>needed maybe?</i>
		Ref. 38				



DECISION GUIDE (continued)  
(Procedures to Prevent Hazards)

SUBJECT REQUIREMENT

40 CFR  
SECTION NOS.

REFERENCES

Provided Not provided Not applicable Comments

F-2b(2)(e) Tank Level of Waste  
The level of waste in uncovered tanks to ensure maintenance of sufficient freeboard to prevent overtopping by wave or wind action, or by precipitation (daily).

264.194(a)(3)

P-33

Key words or phrases:  
Inspection of ancillary equipment  
Sampling a storage tank

Ref. 3, Ch. 4-D; Ref. 82  
Ref. 42, pp. 38-39

F-2b(2)(f) Tank Condition Assessment  
The schedule and procedure for assessing the condition of the tank. Procedure must be adequate to detect cracks, leaks, or wall thinning to less than sufficient shell strength.

264.194(b)

P-29

Key words or phrases:  
Frequency of inspection  
Tank internal inspection

Ref. 3, Ch. 4-E; Ref. 82  
Ref. 3, Ch. 4-C; Ref. 82

F-2b(2)(g) Tank Interior Inspection  
Documentation of established procedures for emptying a tank to allow entry and inspection of the interior to detect corrosion or erosion of the tank sides and bottom.

264.194(b)

Key words or phrases:  
Entry of tanks for inspection  
Tank internal inspection

Ref. 51, Sec. 1910.94(d)(11); Ref. 82  
Ref. 3, Ch. 4-C; Ref. 82

F-2b(3) Waste Pile Inspection  
Documentation of inspection of the waste pile during construction or installation of the following:

F-2b(3)(a) Liner Systems  
Inspection of liner systems for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, and foreign materials).

264.254(a)(1)

F-2b(3)(b) Manufactured Liner Materials  
Manufactured liner materials (e.g., membranes, sheets, and coatings) to ensure tight seams and joints and the absence of tears or blisters.

264.254(a)(2)

DECISION GUIDE (continued)  
(Procedures to Prevent Hazards)

SUBJECT REQUIREMENT	40 CFR SECTION NOS.	REFERENCES	Provided	Not provided	Not applicable	Comments
<b>F-2b(3)(c) Containment System</b> Inspection of the containment system whenever any indication of possible failure is indicated.  Key words or phrases: Liner installation process Quality control Liner failure mechanisms Physical failures Biological failures Chemical failures Inspection procedures	264.255	Ref. 11, App. IV Ref. 11, Sec. 5.4.5 Ref. 11, Sec. 4.7 Ref. 11, Sec. 4.7.1 Ref. 11, Sec. 4.7.2 Ref. 11, Sec. 4.7.3 Ref. 21, App. G			<input checked="" type="checkbox"/>	
<b>F-2c Remedial Action</b> A description of procedures for remedial actions to be taken when inspections reveal problems or potential problems. (This section can reference procedures in the contingency plan.)	264.15(c) 264.194(c) 264.255				<input checked="" type="checkbox"/>	
<b>F-2d Inspection Log</b> A copy of the inspection log should be provided that includes the name of the inspector, observations, and remedial actions taken.	264.15(d)				<input checked="" type="checkbox"/>	
<b>F-3 Waiver of Preparedness and Prevention Requirements</b> If a waiver of any preparedness and prevention requirement is sought, the following must be provided:	122.25(a)(6) 264.32 264.35				<input checked="" type="checkbox"/>	
<b>F-3a Equipment Requirements</b> A demonstration that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:	264.32				<input checked="" type="checkbox"/>	
<b>F-3a(1) Internal Communications</b> An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel.	264.32(a)				<input checked="" type="checkbox"/>	
<b>F-3a(2) External Communications</b> A device, such as a telephone (immediately available at the scene of operations) or a handheld two-way radio, for summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams.	264.32(b)				<input checked="" type="checkbox"/>	

DECISION GUIDE (continued)  
(Procedures to Prevent Hazards)

SUBJECT REQUIREMENT	40 CFR SECTION NOS.	REFERENCES	Provided	Not provided	Not applicable	Comments
F-3a(3) <u>Emergency Equipment</u> Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals) spill control equipment, and decontamination equipment.  Key words or phrases: Fire control equipment	264.32(c)	Ref. 25, Secs. 4-7, 5-5, 6-8, 8-6, 9-4; Ref. 28, Sec. 7; Ref. 48; Ref. 50; Ref. 101.			<i>N/A</i>	
F-3a(4) <u>Water for Fire Control</u> Water at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic sprinklers, or water spray systems.	264.32(d)					
F-3b <u>Aisle Space Requirement</u>  Requests for a waiver of the aisle space requirement must be accom- panied by a demonstration that aisle space is not needed to allow the unobstructed movement of personnel, fire protection equipment, or spill control equipment to any area of facility operation in an emergency.	264.35					
F-4 <u>Preventive Procedures, Structures, and Equipment</u>  A description of <u>procedures, structures, or equipment</u> used at the facility for the following:	122.25(a)(8)					
F-4a <u>Unloading Operations</u>  Prevention of hazards in unloading operations (e.g., use of ramps or special forklifts).  Key words or phrases: Handling of hazardous materials	122.25(a)(8)(i)	P. 53  Ref. 28, Sec. 7	✓	<del>✗</del>		<i>not discussed</i>
F-4b <u>Runoff</u>  Prevention of runoff from hazardous waste handling areas to other areas of the facility or environment, or prevention of flooding (e.g., berms, dikes, trenches).	122.25(a)(8)(ii)	Ref. 95; Ref. 73	✓			
F-4c <u>Water Supplies</u>  Prevention of contamination of water supplies.	122.25(a)(8)(iii)		✓			
F-4d <u>Equipment and Power Failure</u>  Mitigation of effects of equipment failure and power outages.	122.25(a)(8)(iv)		✓			<i>Backup power available?</i>

DECISION GUIDE (continued)  
(Procedures to Prevent Hazards)

SUBJECT REQUIREMENT

F-4e Personnel Protection Equipment

Prevention of undue exposure of personnel to hazardous waste (e.g., protective clothing).

Key words or phrases:

Respirators  
Protective clothing  
General OSHA requirements  
OSHA requirements for eye protection  
OSHA requirements for face protection  
OSHA requirements for foot protection  
OSHA requirements for head protection

F-5 Prevention of Reaction of Ignitable, Reactive, and Incompatible Wastes

F-5a Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste

A description of the precautions taken by a facility that handles ignitable or reactive waste to prevent actual ignition, including separation from sources of ignition such as open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., heat producing chemical reactions), and radiant heat. Demonstration that when ignitable or reactive waste is being handled, the owner or operator confines smoking and open flames to specially designated locations. "No Smoking" signs must be conspicuously placed wherever a hazard exists from ignitable or reactive waste.

F-5b General Precautions for Handling Ignitable or Reactive Waste and Mixing of Incompatible Waste

A description of the precautions taken by a facility that treats, stores, or disposes of ignitable or reactive waste, or accidentally mixes incompatible waste or incompatible wastes and other materials, to prevent reactions which: (1) generate extreme heat or pressure, fire or explosions, or violent reactions; (2) produce uncontrolled flammable fumes, dusts, or gases in sufficient quantities to threaten human health or the environment; (3) produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions; (4) damage the structural integrity of the device or facility; (5) by similar means threaten human health or the environment.

Key words or phrases:

Definition of incompatible waste

40 CFR  
SECTION NOS.

122.25(a)(8)(v)

122.25(a)(9)  
264.17(a)

122.25(a)(9)  
264.17(b)

REFERENCES

Ref. 45, Ch. 4-7; Ref. 51, Sec. 1910.134  
Ref. 39, Ch. 2, Part 4  
Ref. 51, Sec. 1910.132  
Ref. 51, Sec. 1910.133  
Ref. 51, Sec. 1910.133  
Ref. 51, Sec. 1910.132  
Ref. 51, Sec. 1910.135

Ref. 102

Ref. 102

Ref. 1, Ch. 1

Provided Not provided Not applicable Comments

P. 44

P. 55

P. 55

not enough detail

DECISION GUIDE (continued)  
(Procedures to Prevent Hazards)

SUBJECT REQUIREMENT

F-5c Management of Ignitable or Reactive Wastes in Containers

Sketches, drawings, or data demonstrating that containers of ignitable or reactive waste are located at least 15 meters (50 feet) from the facility's property line.

Key words or phrases:

Buffer zones

Container separation

Flammable and combustible liquids code information

F-5d Management of Incompatible Wastes in Containers

Description of: (1) the procedures used to ensure that incompatible wastes and materials are not placed in the same container or in an unwashed container that previously held incompatible waste, and (2) dikes, berms, walls, or other devices used to separate wastes in containers, piles, open tanks, or surface impoundments.

Key words or phrases:

Storage requirements for incompatible waste

Case histories of accidents caused by mixing incompatible wastes

F-5e Management of Ignitable or Reactive Wastes in Tanks

A description of the operational procedures used for storing such wastes in tanks that includes specific information on: (1) how the waste is treated, rendered, or mixed before or immediately after placement in the tank so that it is no longer considered ignitable and complies with §264.17(b); or the waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to react or ignite; or the tank is used solely for emergencies.

(2) how facilities that treat or store ignitable or reactive waste in covered tanks comply with the National Fire Protection Association's buffer zone requirements for tanks.

Key words or phrases:

Special requirements for ignitable or reactive wastes

NFPA buffer zone requirements

F-5f Management of Incompatible Wastes in Tanks

A statement that incompatible wastes and materials are not stored in the same tank of in an unwashed tank that previously held an incompatible waste or material.

Key words or phrases:

Special requirements for incompatible wastes

NFPA buffer zone requirements

40 CFR  
SECTION NOS.

122.26(b)(1)(ii)  
264.176

122.25(b)(1)(iii)  
264.177

122.25(b)(2)(vi)  
264.198

122.25(b)(2)(vi)  
264.198(b)

122.25(b)(2)(vi)  
264.199(b)

REFERENCES

Ref. 2, Ch. 4, Sec. F; Ref. 25  
Ref. 2, Ch. 4, Sec. F; Ref. 25  
Ref. 25, Ch. 1, Ch. 4

Ref. 1  
Ref. 27, App. 5

Ref. 1, Ch. 2; Ref. 5; Ref. 8, Sec. 2.2.1  
Ref. 25, Tables 2-1 thru 2-6

Ref. 1, Ch. 2; Ref. 5; Ref. 8, Sec. 2.2.1  
Ref. 25, Tables 2-1 thru 2-6

Provided Not provided Not applicable Comments

✓

✓ not discussed

✓ not discussed

✓ not discussed

✓ not discussed

but dedicated tanks may suffice

DECISION GUIDE (continued)  
(Procedures to Prevent Hazards)

SUBJECT REQUIREMENT

F-5g Management of Ignitable or Reactive Wastes in Waste Piles

A detailed description of the facility operating procedures that demonstrate the following special requirements for ignitable or reactive waste: (1) ignitable or reactive waste is placed in a pile only if the addition of the waste to an existing pile results in the waste or mixture no longer meeting the definition of ignitable or reactive waste under §261.21 or 261.23, and it complies with §264.17(b); or (2) preventive measures are taken to protect the wastes from conditions that might cause it to ignite or react.

Key words or phrases:

Special procedures for management of ignitable and reactive waste  
Buffer zones

F-5h Management of Incompatible Wastes in Waste Piles

A detailed description of the facility operating procedures that demonstrate the following special requirements for incompatible waste: (1) incompatible waste is placed in the same pile only if §264.17(b) is complied with. (2) Adequate buffer or protection of incompatible waste piles from other wastes or material stored on the facility is provided. (3) Previous bases where incompatible wastes or materials were piled must be sufficiently decontaminated to ensure compliance with §264.17(b) if the base is to be reused for hazardous waste.

Key words or phrases:

Special procedures for management of incompatible waste  
Utilization of buffer structures  
Base liner decontamination

G. CONTINGENCY PLAN

A copy of the Contingency Plan or Spill Prevention Control and Countermeasures (SPCC) Plan amended for hazardous waste management to describe the actions facility personnel will take in response to fires, explosions, or any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.

Key words or phrases:

Spill Prevention Control and Countermeasure Plan Amendment

G-1 General Information

Facility name and location, operator, site plan, and description of facility operations.

40 CFR  
SECTION NOS.

REFERENCES

Provided Not provided Not applicable

Comments

122.25(b)(4)(iii)  
264.256  
261.23  
261.21

Ref. 1; Ref. 4, Ch. 3-G  
Ref. 5, pp. VI-24 thru VI-25

122.25(b)(4)(iii)  
264.257

Ref. 1  
Ref. 5, pp. VI-24 thru VI-25

122.25(a)(7)  
264.50 thru  
264.56

264.52(b)

Ref. 24, Ch. 2, pp. 2-31, 2-52, and 2-53

Ref. 24, Ch. 2, pp. 2-15 thru 2-18,  
pp. 2-45 thru 2-46

P. 3-8

DECISION GUIDE (continued)  
(Contingency Plan)

SUBJECT REQUIREMENT	40 CFR SECTION NOS.	REFERENCES
G-2 <u>Emergency Coordinators</u> Names, addresses, office and home phone numbers, and duties of primary and alternate coordinators and statement of authorization of coordinator to commit necessary resources to plan.	264.52(d) 264.55	Ref. 24, Ch. 2, pp. 2-18, pp. 2-46  P. 35-38
G-3 <u>Implementation</u> A description of how and when the contingency plan will be implemented.  Key words or phrases: Criteria for implementation for spills, fire, and explosions	264.52(a) 264.56(d)	Ref. 24, Ch. 2, pp. 2-18, 2-19, and 2-46 thru 2-49
G-4 <u>Emergency Response Procedures</u>		
G-4a <u>Notification</u> Methodology for immediate notification of facility personnel and necessary state or local agencies.	264.56(a)	
G-4b <u>Identification of Hazardous Materials</u> Procedures for identification of hazardous materials involved in the emergency.	264.56(b)	Ref. 24, Ch. 2, pp. 2-23, 2-48, and 2-49
G-4c <u>Assessment</u> Policy for assessment of possible hazards to the environment and human health and need for evacuation and notification of authorities. The authorities to be notified should include the on-scene coordinator for that area or the National Response Center.  Key words or phrases: Incident characterization Physical and chemical properties of chemicals involved in the emergency Potential hazards of chemicals involved (e.g., generation of hazardous gases) Sources of information and response assistance	264.56(c) 264.56(d)	Ref. 24, Ch. 2, pp. 2-23, 2-24, 2-48, and 2-49  Ref. 39, Ch. 1, Part 2 Ref. 28, pp. 331-1106; Ref. 44; Ref. 46  Ref. 39, Ch. 1, Part 3; Ref. 44; Ref. 46 Ref. 39, Ch. 1, Part 7
G-4d <u>Control Procedures</u> Specific control procedures to be taken in the event of a fire, explosion, or release.  Key words or phrases: Types of on-site emergency equipment to be used Spill control and collection	264.52(a)	Ref. 24, Ch. 2, pp. 2-25, 2-26, 2-48 to 2-50; Ref. 10  P. 42  Ref. 39, Ch. 4, Part 1, pp. 1-8 thru 1-12 Ref. 39, Ch. 4, Parts 2 and 3; Ref. 47

DECISION GUIDE (continued)  
(Contingency Plan)

SUBJECT REQUIREMENT	40 CFR SECTION NOS.	REFERENCES	Provided	Not provided	Not applicable	Comments
<b>G-4e Prevention of Reoccurrence of Spread of Fires, Explosions, or Releases</b> Necessary steps to be taken to ensure that fires, explosions, or releases do not occur, reoccur or spread to other hazardous waste at the facility.  Key words or phrases: Stopping processes and operations Collecting and containing released waste Removing or isolating containers	264.56(e)	Ref. 24, Ch. 2, 2-24 to 2-25, pp. 2-49	✓			
<b>G-4f Storage and Treatment of Released Material</b> Provisions for treatment, storage, or disposal of any material that results from a release, fire, or explosion at the facility.  Key words or phrases: Treatment methodology Decontamination	264.56(g)	Ref. 47  Ref. 24, Ch. 2, pp. 2-25 thru 2-26, 2-49 thru 2-50	✓			expand on "flush & drain to appropriate line - (Haz / non Haz)
<b>G-4g Incompatible Waste</b> Provisions for prevention of incompatible waste from being treated, stored, or located in the affected areas until cleanup procedures are completed.	264.56(h)(1)	Ref. 24, Ch. 2, pp. 2-25 thru 2-26, 2-49 thru 2-50	✓			not discussed
<b>G-4h Post-emergency Equipment Maintenance</b> Procedures for ensuring that all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.	264.56(h)(2)	Ref. 24, Ch. 2, pp. 2-25 thru 2-26, 2-49 thru 2-50				Re Over pack on
<b>G-4i Container Spills and Leakage</b> Specification of procedures to be used when responding to container spills or leakage that includes procedures and timing for expeditious removal of spilled waste and repair or replacement of the container(s).  Key words or phrases: Steps to take if a container is not in good condition Cleanup resource and techniques Incident mitigation	264.171	Ref. 2, Ch. 4, Sec. C-4 Ref. 39, Ch. 4, Part 2 Ref. 39, Ch. 4, Part 3				notice of leak in instruction Inspection Guide P 28 - No discussion otherwise



DECISION GUIDE (continued)  
(Contingency Plan)

SUBJECT REQUIREMENT

40 CFR  
SECTION NOS.

REFERENCES

Provided Not provided Not applicable Comments

G-4j Tank Spills and Leakage

264.194(c)

Documentation of the procedures to be used by the facility owner or operator to respond to tank spills or leakage that includes procedures and timing for expeditious removal of leaked or spilled waste and repair of the tank.

Key words or phrases:

Response to leaks and spills  
Cleanup resources and techniques  
Incident mitigation  
Dikes

P. 30- Tank  
+ usp. build  
P. 104 - Containment

Ref. 3, Ch. 4-F  
Ref. 39, Ch. 4, Part 2  
Ref. 39, Ch. 4, Part 3  
Ref. 25, Sec. 2.0 thru 2.33

G-4k Waste Piles

G-4k(1) Waste Pile Containment System Failures

264.51(a)  
264.255(a)

Documentation describing how indications of possible failure of the waste pile containment system will result in inspection of that system in accordance with the provisions of the containment system evaluation and repair plan. Indications of possible failure of the containment system include: liquid detected in the leachate detection system (where applicable); evidence of leakage or potential of leakage in the base; erosion of the base; and apparent or potential deterioration of liner(s) based on observation or test samples of liner materials.

Key words or phrases:

Containment system repairs and contingency plans  
Cleanup resources  
Incident mitigation

Ref. 4, Ch. 4-B  
Ref. 39, Ch. 4, Part 2  
Ref. 39, Ch. 4, Part 3

G-4k(2) Elements of a Containment System Evaluation and Repair Plan

264.255(d)(2)

A containment system evaluation and repair plan describing testing and monitoring techniques; procedures to evaluate the integrity of the containment system if a possible failure occurs; a schedule of actions to be taken during a possible failure; and a description of repair techniques to be used if leakage occurs because of containment system failure or deterioration that does not require the waste pile to be removed from service.

Key words or phrases:

Contingency plan content and organization

Ref. 24, Sec. 8, Ch. 2

DECISION GUIDE (continued)  
(Contingency Plan)

SUBJECT REQUIREMENT

40 CFR  
SECTION NOS.

REFERENCES

Provided Not provided Not applicable

Comments

G-4k(3) Criteria for Removal of Waste Pile From Service in Case of Positive Failure of the Containment System  
A description of the procedures for removing a waste pile from service whenever a positive indication of failure of the Containment System exists. Indications of positive failure of the containment system include: waste detected in the leachate detection system (where applicable); breach of the base (i.e., a hole, tear, crack, or separation). If the waste pile must be removed from service, the owner will immediately stop adding wastes to the pile, immediately contain any leakage which has or is occurring; immediately cause the leak to be stopped; and if the leak cannot be stopped by any other means, remove the waste from the base.

264.255(b) and (c)  
264.255(d)(1)

Key words or phrases:  
Inspection of liners  
Containment system repairs and contingency plans

G-4k(4) Restoration of a Waste Pile to Service  
Demonstration that if a waste pile has been removed from service, it will be restored only if: (1) the containment system has been repaired; and (2) the containment system has been certified by a qualified engineer as meeting the design specifications approved in the permit.

264.255(e)

Key words or phrases:  
Containment system repairs

G-4k(5) Nonrepair of Waste Piles Removed From Service  
Demonstration that if a waste pile that has been removed from service in accordance to the aforementioned requirements is not being repaired, it will be closed in accordance with §264.258.

264.255(f)  
264.258

Key words or phrases:  
Removal of hazardous wastes

G-5 Emergency Equipment

264.52(e)

Location, description, and capabilities of emergency equipment.

Key words or phrases:  
Spill control and collection equipment  
General emergency equipment

Fire control equipment  
Respirators  
Protective clothing

Ref. 4, Ch. 4-A  
Ref. 4, Ch. 4-B

Ref. 4, Ch. 4-B

Ref. 15, Sec. 4.2 to 4.4

Ref. 47  
Ref. 24, Ch. 2, pp. 2-27 to 2-30,  
pp. 2-50 to 2-51; Ref. 39, Ch. 4,  
Part 1, pp. 1-8 to 1-12  
Ref. 28, Sec. 7; Ref. 48; Ref. 50  
Ref. 45, Ch. 5; Ref. 39, Ch. 2, Part 3  
Ref. 39, Ch. 2, Part 4

P, 44 Personnel equip  
P, 38  
Fire Equipment

DECISION GUIDE (continued)  
(Contingency Plan, Personnel Training)

SUBJECT REQUIREMENT

G-6 Coordination Agreements

A description of coordination agreement with local police and fire departments, hospitals, contractors, and state and local emergency response teams to familiarize them with the facility and actions needed in case of emergency. Documentation of refusal to enter into a coordination agreement.

G-7 Evacuation Plan

A description of signal(s) to be used to begin evacuation routes, and planned and alternate evacuation routes.

Key words or phrases:

Criteria and signals to begin evacuation  
Planned and alternate evacuation routes

G-8 Required Reports

Provisions for submission of reports of emergency incidents within 15 days of occurrence, and maintenance of records identifying the time, date, and details of an emergency incident.

H. PERSONNEL TRAINING

H-1 Outline of Training Program

An outline of both the introductory and continuing training programs by owners or operators to prepare personnel to operate or maintain the facility in a safe manner. Includes a brief description on how training will be designed to meet actual job tasks. (Note: on-the-job training may be used to comply with these requirements.)

H-1a Job Titles and Duties

The name, job title, duties, and job description of each employee whose position at the facility is related to hazardous waste management.

H-1b Training Content, Frequency, and Techniques

A description of the content, frequency, and technique used in both introductory and continuing training (including an annual review of the initial training) for each employee.

Key words or phrases:

Training content, frequency, and techniques  
Level of training required

Training for personnel safety  
Release prevention and response  
Decontamination procedures  
Facility operation and maintenance  
High hazard operations  
Maintaining documentation

40 CFR  
SECTION NOS.

264.52(c)  
264.37

264.52(f)

264.56(j)

122.25(a)(12)  
264.16

264.16(d)(1)  
264.16(d)(2)

264.16(d)(3)  
264.16(c)

REFERENCES

Ref. 24, Ch. 2, pp. 2-30 to 2-31,  
2-52 to 2-52

Ref. 24, Ch. 2, pp. 2-32, 2-52  
Ref. 24, Ch. 2, pp. 2-23, 2-52

Ref. 24, Ch. 2, pp. 2-31, pp. 2-52 to  
2-53

Ref. 16, Secs. 3.1.4, 4.1.2

Ref. 16, Ch. 3, Secs. 3.2 to 3.3

Ref. 16, Ch. 4-5  
Ref. 16, Ch. 4, Secs. 4.1.1, 4.1.2,  
4.1.4  
Ref. 16, Sec. 5.2  
Ref. 16, Sec. 5.3  
Ref. 16, Sec. 5.4  
Ref. 16, Sec. 5.5  
Ref. 16, Sec. 5.6  
Ref. 16, Sec. 5.7

Provided

Not  
provided

Not  
applicable

Comments

✓

✓

✓

Not in writing?  
(not requires

✓

✓

✓

Signal for evacuate  
not specific  
plan complete otherwise

✓

✓

✓

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✓

✓

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DECISION GUIDE (continued)  
(Personnel Training)

SUBJECT REQUIREMENT	40 CFR SECTION NOS.	REFERENCES	Provided	Not provided	Not Applicable	Comments
H-1c <u>Training Director</u>	264.16(a)(2)	Ref. 16, Sec. 3.1.6		<input checked="" type="checkbox"/>		no mention
Demonstration that the program is directed by a person trained in hazardous waste management.						
H-1d <u>Relevance of Training to Job Position</u>	264.16(1)	Ref. 16, Ch. 5	<input checked="" type="checkbox"/>			
Instruction of facility personnel in hazardous waste management procedures (including contingency plan implementation) relevant to their positions.						
H-1e <u>Training for Emergency Response</u>	264.16(a)(3)	Ref. 16, Secs. 5.3, 5.6	<input checked="" type="checkbox"/>			
Demonstration that facility personnel are able to respond effectively to emergencies and are familiar with emergency procedures, emergency equipment, and emergency systems.						
H-1e(1) <u>Procedures for Using, Inspecting, Repairing, and Replacing Facility Emergency and Monitoring Equipment</u>		Ref. 16, Sec. 5.3 to 5.5	<input checked="" type="checkbox"/>			
Key words or phrases: Respirators		Ref. 16, Ch. 8-9	<input checked="" type="checkbox"/>			
H-1e(2) <u>Key Parameters for Automatic Waste Feed Cutoff Systems</u>		Ref. 16, Secs. 5.5.1 to 5.5.4	<input checked="" type="checkbox"/>			
H-1e(3) <u>Communications or Alarm Systems</u>		Ref. 16, Sec. 5.3	<input checked="" type="checkbox"/>			
H-1e(4) <u>Response to Fires</u>		Ref. 16, Secs. 5.3, 5.5.6.3; Ref. 28, Sec. 7	<input checked="" type="checkbox"/>			
H-1e(5) <u>Response to Groundwater Contamination Incidents</u>		Ref. 16, Sec. 5.3	<input checked="" type="checkbox"/>			
H-1e(6) <u>Shutdown of Operations</u>		Ref. 16, Secs. 5.3, 5.5.4	<input checked="" type="checkbox"/>			
H-2 <u>Implementation of Training Program</u>	264.16(d)(4) 264.16(b)	Ref. 16, Secs. 3.1.5 and 4.1.6	<input checked="" type="checkbox"/>			
Indication that training has been successfully completed by facility personnel within 6 months of their employment or assignment to a facility, or transfer to a new position at a facility, whichever is later. Employees hired after the effective date of these regulations must not work in unsupervised positions until they have completed the training requirements. Records documenting that the required training has been given to and completed by facility personnel must be maintained.						

DECISION GUIDE (continued)  
(Closure Plan)

SUBJECT REQUIREMENT

I. Closure and Post-closure Plans.

I-1 Closure Plans

A copy of the written closure plan consistent with I-1a through I-1k including an estimate of the maximum inventory of wastes in storage and treatment at any time.

Key words or phrases:  
Closure plan revisions

I-1a Partial Closure

If partial closure is anticipated, a description of how and when the facility will be partially closed, including an identification of the maximum extent of operation after partial closure.

Key words or phrases:  
Maximum waste inventory

I-1b Final Closure

A description of how and when the facility will be finally closed.

I-1c Maximum Waste Inventory

A description of the maximum inventory of wastes in storage and treatment.

I-1d Closure Performance Standard

A description of how closure minimizes the need for post-closure maintenance and minimizes releases of wastes.

I-1e Schedule for Closure

An estimate of the expected year of closure and schedule for final closure including total time to close the facility and time for closure activities.

I-1e(1) Time Allowed for Closure

A schedule for closure which shows that all hazardous wastes will be treated, removed off-site or disposed of on-site within 90 days from receipt of final volume of waste, and that all closure activities will be completed within 180 days from receipt of final volume of waste.

40 CFR  
SECTION NOS.

122.25(a)(13)  
264.110 thru  
264.120

122.25(a)(13)  
264.112

264.112(a)(1)

264.112(a)(1)

264.112(a)(2)

264.111

264.112(a)(4)

264.113(a) and (b)

REFERENCES

Refs. 15, 43, 57, 53

Ref. 43, Secs. 2.5, 11.1, 13.2.2;  
Ref. 57, Secs. 2.5, 11.1, 13.2.2

Ref. 43, Secs. 2.2.3, 2.2.4, 12.2.2;  
Ref. 57, Secs. 2.2.3, 2.2.4, 12.2.2

Ref. 43, Secs. 2.2.4 and 12.2.2;  
Ref. 57, Secs. 2.2.4, 12.2.2

Refs. 15, 43, 57, 53

Refs. 15, 43, 57, 53

Ref. 43, Secs. 2.2.8, 12.2.6;  
Ref. 57, Secs. 2.2.8, 12.2.6

Ref. 43, Secs. 2.2.6, 13.2.1;  
Ref. 57, Secs. 2.2.6, 13.2.1

Provided Not provided Not applicable Comments

N/A

✓

no date of closure given  
but time periods given  
not consistent with Part 11.

✓

✓

✓

no year given?

✓

P. 66

says 9  
year?

but chart says 9 months -

DECISION GUIDE (continued)  
(Closure Plan)

SUBJECT REQUIREMENT

40 CFR  
SECTION NOS.

REFERENCES

Provided Not provided Not applicable

Comments

I-1e(1)(a) Extensions for Closure Time  
A petition for a schedule for closure which exceeds the 90 days for treatment, removal or disposal of wastes and/or the 180 days for completion of closure activities made to the Regional Administrator.

264.113(a)  
264.113(b)

Request not made  
~~not~~

I-1f Disposal or Decontamination of Equipment

264.114

Ref. 43, Secs. 2.2.5, 12.2.3;  
Ref. 57, Secs. 2.2.5, 12.2.3

A description of how all facility equipment and structures will be decontaminated or disposed of when closure is completed.

I-1g Closure of Containers

264.178

Show that at closure, all hazardous waste and hazardous waste residue will be removed from the containment system, and how remaining containers, liners, bases, and soil containing or contaminated with hazardous waste or hazardous waste residues will be decontaminated or removed.

Key words and phrases:

Container removal, recycling  
Site decontamination  
Disposal of contaminated soils  
Facility decontamination  
Drum cleaning  
Drum reconditioning (pesticides)

Ref. 2, Ch. 4, Sec. C-5

Ref. 15, Sec. 4.24  
Ref. 3, Ch. 6-B2  
Ref. 40, pp. 9, 15 and 16  
Ref. 41

I-1h Closure of Tanks

264.197

Show that at closure, all hazardous waste and hazardous waste residues will be removed from tanks, discharge control equipment, and discharge confinement structure, and the facility will be decontaminated.

Key words or phrases:

Tank closure plan guidance  
Maximum amount of inventory  
Waste removal from tanks  
Facility decontamination procedures

Ref. 43, Ch. 3  
Ref. 43, Ch. 3.3.1  
Ref. 3, Ch. 6-B1  
Ref. 3, Ch. 6-B2

I-1i Closure of Waste Piles

264.258

Show how at closure, all hazardous waste and hazardous waste residues will be removed from the pile, and any component of the containment system containing or contaminated with hazardous waste or hazardous waste residues will be decontaminated or removed.

Key words or phrases:

Wet method for sediment removal  
Dry methods for sediment removal  
Sediment dewatering  
Soil removal  
Liner removal methods  
Air emission control

Ref. 15, Sec. 4.2.1  
Ref. 15, Sec. 4.2.2  
Ref. 15, Sec. 4.3  
Ref. 15, Sec. 4.2.4  
Ref. 15, Sec. 4.4.2  
Ref. 15, Sec. 4.9

### SUBJECT REQUIREMENT

If changes in operating plans or facility design affect the closure plan or the expected year of closure changes, a modification of the closure plan.

**1-3 Notice in Deed and Notice to Land Authority (Reserved)**

A copy of the most recent closure cost estimate, calculated to cover the cost of closure when the cost would be greatest (not including partial closure). The cost must be updated annually using an inflation factor.

**Key words or phrases:**  
Annual adjustment for inflation

A copy of the established financial assurance mechanism for facility closure. The mechanism must be one of the following: 1-5(a) through 1-5(c).

A copy of the closure trust fund agreement with the wording required in 264.151(a)(1) and a formal certification of acknowledgment.

**I-5b(1) Surety Bond Guaranteeing Payment Into a Closure Fund**  
A copy of the surety bond with the wording required in 264.151(b), a copy of the standby trust fund, and a written guarantee that the owner or operator will fund the standby fund at least 60 days before final closure begins and will provide alternate financial assurance if the bond is cancelled.

**1-5b(2) Surety Bond Guaranteeing Performance of Closure**  
A copy of the surety bond with the wording required in Part 264.151(c), guaranteeing that the owner or operator will perform closure according to the closure plan and the requirements of Subpart G.

40 CFR  
SECTION NOS.

**264.112(b)**

**122.25(a)(15)**  
**264.142**

122.25(a)(15)  
264.143

**264.143(a)**  
**264.151(a)(1)**

**264.143(b)**  
**264.151(b)**

**264.143(c)**  
**264.151(c)**

## REFERENCES

Ref. 43, Secs. 2.5, 11.1, 13.2.2;  
Ref. 57, Secs. 2.5, 11.1, 13.2.2

**Refs. 54, 56, 67**

Ref. 54, Sec. 8.0; Ref. 67; Ref. 71;  
Sec. III

**Ref. 67, Sec. HH**

**Ref. 67, Sec. HH**

**Ref. 67, Sec. HH**

**Ref. 67, Sec. HH**

Ref. 67, Sec. HH

Provided	Not provided	Not applicable	Comment
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2/ Future work?

✓ ~~State~~ ~~to~~

DECISION GUIDE (continued)  
(Closure Plan)

SUBJECT REQUIREMENT	40 CFR SECTION NOS.	REFERENCES	Provided	Not provided	Not applicable	Comments
<b>I-5c Closure Letter of Credit</b>  A copy of the irrevocable letter of credit with the wording required in 264.151(f) and a copy of the standby trust fund. The letter of credit must be issued for a period of at least one year and be for the amount of estimated closure.	264.143(d) 264.151(f)	Ref. 67, Sec. HH				
<b>I-5d Use of Multiple Financial Mechanisms</b>  A copy of a combination of trust fund agreements, surety bond guaranteeing payment into a closure trust fund or letters of credit, which provide financial assurance for the amount of closure.	264.143(g)	Ref. 67, Sec. HH				
<b>I-5e Use of Financial Mechanism for Multiple Facilities</b>  A copy of a financial assurance mechanism for more than one facility showing, for each facility, the EPA ID number, name, address, and amount of funds closure assured by the mechanism. A letter of credit may not be used to assure funds in more than one region.	264.143(h)	Ref. 67, Sec. HH	✓			update to 13 May 1983
<b>I-6 Post-closure Cost Estimate (Reserved)</b>						
<b>I-7 Financial Assurance Mechanism for Post-closure (Reserved)</b>						
<b>I-8 Liability Requirements (Reserved)</b>						
<b>I-9 Proof of Coverage by a State Financial Mechanism</b>  Where a state has hazardous waste regulations with equivalent or greater liability requirements for financial assurance for closure and post-closure care, a copy of the state-required financial mechanisms, including the facility EPA ID number, name, address, and amounts of coverage. If a state assumes legal responsibility for compliance with closure, post-closure, or liability requirements or the state assures that state funds are available to cover those requirements, then facility is in compliance and may include a copy of a letter from the state describing the state assumption of responsibility and including the facility EPA ID number, name, address, and amounts of liability coverage or funds for closure or post-closure care that are assured by the state. If state coverage is less than federal requirements (264.143, 145, and 147), then the owner or operator must provide demonstration of additional financial assurance mechanisms to equal federal requirements.	122.25(a)(18) 264.149 264.150					



DECISION GUIDE (continued)  
(Closure Plan)

SUBJECT REQUIREMENT

J. Other Federal Laws

Demonstration of compliance with the requirements of applicable Federal laws such as the Wild and Scenic Rivers Act National Historic Preservation Act of 1966, Endangered Species Act, Coastal Zone Management Act, Fish and Wildlife Coordination Act.

Key words or phrases:

Wild and Scenic Rivers Act

Background

Applicability/procedures

Assistance in compliance

National Historic Preservation Act of 1966

Background

Applicability

Procedures

Assistance in compliance

Endangered Species Act

Background

Applicability

Assistance in compliance

40 CFR  
SECTION NOS.

122.25(a)(20)  
122.12

REFERENCES

Ref. 58, Part 2, p. 3-5  
Ref. 58, Part 2, p. 3-7  
Ref. 58, Part 2, p. 3-9

Ref. 58, Part 2, p. 4-5  
Ref. 58, Part 2, p. 4-9  
Ref. 58, Part 2, p. 4-11  
Ref. 58, Part 2, p. 4-17

Ref. 58, Part 2, p. 5-3  
Ref. 58, Part 2, p. 5-9  
Ref. 58, Part 2, p. 5-13

provided	Not provided	Not applicable	Comments
		<input checked="" type="checkbox"/>	not applicable in Phase II state. per 123.7 a+b

not applicable in  
Phase II state.

per 123.7 a+b